Message

From: Imfeld, Sterling [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=641139BFBE3C4086AE671678EBA9FCBE-IMFELD, STERLING]

Sent: 9/19/2017 9:08:44 PM

To: Schaefer, Ron [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e4cf03e763744da1a7baa1f2951ab544-Schaefer, Ron]; VanErp, Dale

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=2c601db6d20a4473b51ea4a5f03f5954-VanErp, Dale

CC: Sun, Ruonan [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=9974424e49a74e8aafda9705a313dc1a-Sun, Ruonan]; Mayotte, Steve

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c0af20a6cf7e4368b2a30f9027bf70ad-Mayotte, Steve]; Healy, Stephen

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d1638b0a30364c7d98ea7af410a9cb2a-Healy, Stephen]; Duncan, Allen

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=5f4a476a56c342e7a2eeed96115208ac-Duncan, All]; Smith, PeterL

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=230cfaaee4d143e3b6f469e351544085-Smith, Pete]

Subject: RE: Cummins Confirmatory Testing

Thanks for the information Ron.

From: Schaefer, Ron

Sent: Tuesday, September 19, 2017 4:48 PM **To:** VanErp, Dale <VanErp.Dale@epa.gov>

Cc: Imfeld, Sterling <imfeld.sterling@epa.gov>; Sun, Ruonan <sun.ruonan@epa.gov>; Mayotte, Steve

<mayotte.steve@epa.gov>; Healy, Stephen <healy.stephen@epa.gov>; Duncan, Allen <duncan.allen@epa.gov>; Smith,

PeterL <Smith.PeterL@epa.gov>

Subject: Cummins Confirmatory Testing

Dale.

As we discussed today, you asked me to send out a note to your team letting them know about extra testing involved with the Cummins confirmatory engine. Part of confirming GHG test results from on-highway engines is the possibility that some engine families can be used in both a tractor and a vocational vehicle application. This flexibility almost always involves a separate calibration for each of these vehicle applications (or a separate model for each both within a single engine family). As a result, manufacturers certify one set of test results for engines used in tractors and another set of results for those engines within the family used in a vocational application. This will require us to obtain 2 sets of data for the Cummins confirmatory engine. Each set of data will still include an FTP and an RMC test with each of the two calibrations. Depending how we are doing for time during the week, we can forego the NTE testing with each calibration if we need to. The Ford and Detroit Diesel engines don't have this requirement because they are only for vocational applications.

Thank you, Ron

Ronald M. Schaefer Mechanical Engineer US Environmental Protection Agency Office of Transportation and Air Quality Compliance Division 2000 Traverwood Ann Arbor, MI 48105